

SYSTEM TO CONTROL DAYLIGHT AND ARTIFICIAL
ILLUMINATION AND SUN GLARE IN A SPACE

ABSTRACT OF THE DISCLOSURE

An illumination maintenance system for maintaining a desired illumination profile in a space throughout at least a portion of a day where the illumination sources include daylight and artificial light, the system comprising a first sensor for sensing an illumination level in at least a portion of the space, at least one window treatment for at least one opening for allowing daylight into the space, the window treatment selectively altering the amount of daylight entering the space, a plurality of electric lamps providing artificial light to supplement the daylight illumination of the space; the electric lamps being dimmable, a control system controlling the at least one window treatment and the plurality of electric lamps to maintain the desired illumination profile in the space, the control system controlling the plurality of electric lamps so that the dimming level of each lamp is adjusted to achieve the desired lighting profile and compensate for the daylight illumination in the space throughout at least the portion of the day; and the control system further operating to adjust the window treatment in the event of sun glare through the opening to reduce the sun glare and such that when the desired illumination profile within a defined tolerance is achieved, the control system stops varying the dimming levels of the lamps and the adjustment of the at least one window treatment.